REMARKS/ARGUMENTS

Summary

Claims 20-32 are pending. Claims 20 and 22-30 have been amended and claims 33-39 added. No new matter has been added.

Telephonic Interview

Applicants thank the Examiner for the telephonic interview of September 11, 2009 with Applicant's attorney, Anthony P. Curtis, Reg. 46,193. During the interview, the Examiner and Applicant's attorney discussed the differences between the claims and the cited references. Applicant agreed to amend portions of the specification to change various typographical errors and to reduce the instances of repetition in claim 20. The Examiner also agreed that the term "ad hoc" used in paragraph [0082] of Mikkola does not, in fact, refer to direct mode communications but instead simply refers to an ad hoc group as is conventionally known in the field of communications.

Rejection of Claims

Claims 20-30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mikkola (U.S. Patent Publication No. 2004/0024902) in view of the Tetra standards. Applicants traverse the rejections.

Claim 20 recites a method of radio communication in which a mobile station maintains a communication group set that comprises an ordered list of multiple user groups. This list is used for scanning for radio frequency activity among at least some of the groups, which each communicate by ETSI direct mode communication on an associated direct mode radio frequency channel for the group. The mobile station periodically samples each of the direct mode radio frequency channels to determine if there is any radio frequency activity comprising a direct mode communication on the direct mode radio frequency channel. Thus, claim 20 specifically recites that the mobile station periodically determines whether direct mode communications are occurring on various RF carriers.

Mikkola does not anticipate or suggest such a method. Instead, Mikkola discloses a method in which the various functions occur in indirect communications.

To begin, Mikkola discloses an apparatus in which user data is transferred between media gateway controllers (see, e.g., paragraph [0002], claim 1 preamble). As described, prior to Mikkola, the gateway intelligence is in a media gateway controller (MGC) and the actual switching/media transfer is performed in a media gateway. The media gateway informs the MGC whenever a calling event to which instructions may apply occurs and the MGC commands the media gateway to act according to a particular instruction. The problem with this is that it requires continuous message exchange between the MGC and the media gateway.

Mikkola created, in the media gateway, a user termination associated with the user that is not related to any specific call and directs all media streams via the user termination. Since the user termination is not call specific, part of the intelligence in the media gateway controller is transferred to the user termination and applied to all of the user's media streams. The user termination allows an intermediary between mobile devices that controls various functions of the calls (media gateways) to act without having to request instructions from the MGC. Note, however, that the user termination of Mikkola is a logical entity, not the physical mobile device recited in claim 1.

The Office Action indicates that Applicant's previous arguments include that "…Mikkola discloses a logical entity and not a physical mobile device and that they are separate from each other and [the method] does not occur in the mobile device or [when the device operates in] direct mode…" and respectfully disagrees with each point.

Regarding the argument that "Mikkola discloses a logical entity and not a physical mobile device and that they are separate from each other," Applicant never argued that Mikkola does not disclose a physical mobile device. Applicant argued that the logical entity (user termination) and physical mobile device (user equipment/UE) are separate from each other. Although the Office Action disagrees, this is expressly stated, for example, in paragraphs [0007], [0023]-[0025] and [0054] and shown in Fig. 1 of Mikkola.

Moreover, with regard to the argument that the method does not occur in the mobile device, the above paragraphs repeatedly indicate that the user termination is created in the media gateway <u>not</u> in mobile station. For example, paragraph [0007] states

"[t]he invention is based on the idea of creating in the media gateway a user termination associated with the user…," while paragraph [0023] states "FIG. 1 describes the *logical* entities within the media gateway that can be controlled by the MGC and that relates only to one user UE," and paragraph [0054] states "[t]he User—User Plane Function U-UPF 20 (e.g. in a server), and more precisely the user terminations of the invention…"

In addition to this, during the interview, the Examiner indicated that the term "direct mode" may be interpreted broadly. However, as is clearly stated by MPEP 2111 as well as numerous CAFC cases, such interpretation must be in light of the specification as it would be interpreted by one of ordinary skill in the art. DMO (and TMO) is a well known term in the field of radio communications (see, e.g., the ETSI standard ETS 300 396-3: March 1998 page 14, US Patent 5,960,360, US Patent 7,127,265, US Patent Application Publication 20040190483, US Patent Application Publication 20050159174, GB 2285723; Terrestrial Trunked Radio – TETRA A Global Security Tool, P. Stavroulakis, Springer-Verlag, 2007). Applicant further notes that the above ETS standard is referred to repeatedly and ETS 300 396-3 has already been provided to the Examiner along with the IDS of August 1, 2006 (initialed by the Examiner) and also indicated in the PTO-492 provided to Applicant in the Office Action of September 17, 2008. However, during the interview, Applicant agreed to include further evidence of this and thus has enclosed a copy of section 3.1 of the current ETS for the Examiner's benefit.

From this, it is readily apparent that the devices in Mikkola communicate using trunked mode in which infrastructure elements are present. Some of these infrastructure elements are clearly shown in Mikkola in Figs. 1-3 and described in the corresponding text (e.g., paragraphs [0043]-[0046]). This is simply not ETSI direct mode communication, which occurs directly between mobile devices.

Further, for example, in the description in paragraphs [0033] and [0082] Mikkola mentions "attachment." However, as is well known, there is no attachment in direct mode – this terminology is only used to describe the procedure of linking to a group in trunked mode communications.

As Applicant already noted, the cited paragraphs ([0085], [0089], [0092]) do not disclose the limitations of claim 20. Paragraph [0085] merely generally states that group participation parameters are modifiable by the user. Paragraphs [0089] and [0092] are directed to filtering simultaneous media streams to the mobile device, describing use of groups prioritization for interruption of lower-priority traffic. However, none of these paragraphs discuss this occurring in the mobile device or, further, in the mobile device using direct mode communications.

Further, as Applicant has explained throughout the instant application features that may be available in trunked mode communications can easily be replicated in direct mode communications, e.g., due to the different methods used in the communication and the limited resources available. Moreover, Mikkola is directed towards the need to filter between media streams (see, e.g., paragraph [0005]) rather than monitoring and surveillance procedures. This mechanism, participating in a call and at the very same time monitoring other RF carriers, is complicated, far from trivial and not referred or indicated by any direct mode standard. Furthermore, the DMO standard repeatedly supplied contains specific dedicated monitoring, surveillance rejection and other call maintenance procedures that are entirely different than and cannot be extended from similar procedures in trunked mode communications.

In summary, claim 20 recites a method occurring in a mobile station while Mikkola is directed to methods of using a user termination in a gateway of the network. Claim 20 also recites a direct mode communication method while Mikkola is directed entirely to trunked mode communications. The features of trunked mode communications are not readily extendable to direct mode communications.

As the cited references do not anticipate or suggest a method in which a mobile station periodically determines if there is any radio frequency activity on direct mode communication channels, claim 20 is patentable over the cited references.

For at least similar reasons, claim 30 is similarly patentable over the cited references.

Claims 21-29 and 31-39 are dependent on allowable claim 20. Thus, claims 21-39 are patentable without more.

Conclusion

Applicants respectfully requests that a timely Notice of Allowance be issued in this case and such action is earnestly solicited by the Applicants. Should the Examiner have any questions, comments, or suggestions, the Examiner is invited to contact the Applicants' attorney or agent at the telephone number indicated below. Applicants herein petition for any extension of time necessary for the filing of this response. Please charge any fees that may be due for this filing to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

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